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 NEWS  1           Web Page for STN Seminar Schedule - N. America
 NEWS  2  NOV 21   CAS patent coverage to include exemplified prophetic
                   substances identified in English-, French-, German-,
                   and Japanese-language basic patents from 2004-present
 NEWS  3  NOV 26   MARPAT enhanced with FSORT command
 NEWS  4  NOV 26   CHEMSAFE now available on STN Easy
 NEWS  5  NOV 26   Two new SET commands increase convenience of STN
                   searching
 NEWS  6  DEC 01   ChemPort single article sales feature unavailable
 NEWS  7  DEC 12   GBFULL now offers single source for full-text
                   coverage of complete UK patent families
 NEWS  8  DEC 17   Fifty-one pharmaceutical ingredients added to PS
 NEWS  9  JAN 06   The retention policy for unread STNmail messages
                   will change in 2009 for STN-Columbus and STN-Tokyo
 NEWS 10  JAN 07   WPIDS, WPINDEX, and WPIX enhanced Japanese Patent
                   Classification Data
 NEWS 11  FEB 02   Simultaneous left and right truncation (SLART) added
                   for CERAB, COMPUAB, ELCOM, and SOLIDSTATE
 NEWS 12  FEB 02   GENBANK enhanced with SET PLURALS and SET SPELLING
 NEWS 13  FEB 06   Patent sequence location (PSL) data added to USGENE
 NEWS 14  FEB 10   COMPENDEX reloaded and enhanced
 NEWS 15  FEB 11   WTEXTILES reloaded and enhanced
 NEWS 16  FEB 19   New patent-examiner citations in 300,000 CA/CAplus
                   patent records provide insights into related prior
                   art
 NEWS 17  FEB 19   Increase the precision of your patent queries -- use
                   terms from the IPC Thesaurus, Version 2009.01
 NEWS 18  FEB 23   Several formats for image display and print options
                   discontinued in USPATFULL and USPAT2
 NEWS 19  FEB 23   MEDLINE now offers more precise author group fields
                   and 2009 MeSH terms
 NEWS 20  FEB 23   TOXCENTER updates mirror those of MEDLINE - more
                   precise author group fields and 2009 MeSH terms
 NEWS 21  FEB 23   Three million new patent records blast AEROSPACE into
                   STN patent clusters

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              AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

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FILE 'HOME' ENTERED AT 17:57:21 ON 24 FEB 2009

=> file caplus
COST IN U.S. DOLLARS   SINCE FILE   TOTAL
                                                           ENTRY   SESSION
FULL ESTIMATED COST   0.22   0.22

FILE 'CAPLUS' ENTERED AT 17:57:43 ON 24 FEB 2009

FILE COVERS 1907 - 24 Feb 2009 VOL 150 ISS 9
FILE LAST UPDATED: 23 Feb 2009 (20090223/ED)

Caplus now includes complete International Patent Classification (IPC)
reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> s transport? (s) hydrocarbon? (s) nitrogen
        930365 TRANSPORT?
        562515 HYDROCARBON?
        732618 NITROGEN
          4235 NITROGENS
        735596 NITROGEN
                 (NITROGEN OR NITROGENS)
L1   70 TRANSPORT? (S) HYDROCARBON? (S) NITROGEN

=> s l1 and fischer tropsch
         27967 FISCHER
            30 FISCHERS
         27988 FISCHER
                 (FISCHER OR FISCHERS)
          9856 TROPSCH
          9770 FISCHER TROPSCH
                 (FISCHER(W)TROPSCH)
L2   4 L1 AND FISCHER TROPSCH

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=> d l2 ibib ab tot
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L2 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2007:1104095 CAPLUS
DOCUMENT NUMBER: 148:522311
TITLE: Neural network modeling of emissions from medium-duty vehicles operating on Fischer-Tropsch synthetic fuel
AUTHOR(S): Perhinschi, Mario G.; Wayne, W. Scott; Clark, Nigel N.; Lyons, Donald W.
CORPORATE SOURCE: Mechanical and Aerospace Engineering, West Virginia University, USA
SOURCE: Society of Automotive Engineers, [Special Publication] SP (2007), SP-2090(General Emissions), 103-113
CODEN: SAESA2; ISSN: 0099-5908
PUBLISHER: Society of Automotive Engineers
DOCUMENT TYPE: Journal
LANGUAGE: English
AB West Virginia University has conducted research to characterize the emissions from medium-duty vehicles operating on Fischer-Tropsch synthetic gas-to-liquid compression ignition fuel. The West Virginia University Transportable Heavy Vehicle Emissions Testing Laboratory was used to collect data for gaseous emissions (carbon dioxide, carbon monoxide, oxides of nitrogen, and total hydrocarbon) while the vehicles were exercised through a representative driving schedule, the New York City Bus Cycle (NYCB). Artificial neural networks were used to model emissions to enhance the capabilities of computer-based vehicle operation simulators. This modeling process is presented in this paper. Vehicle velocity, acceleration, torque at rear axel, and exhaust temperature were used as inputs to the neural networks. For each of the four gaseous emissions considered, one set of training data and one set of validating data were used, both based on the New York City Bus Cycle. Four different types of artificial neural networks were investigated: linear, single hidden layer with sigmoid activation function, nonlinear polynomial (Sigma Pi), and Gaussian radial basis function neural network. The accuracy of the continuous ests. of the models was evaluated in terms of integral, maximum, and standard deviation of the modeling error. The accuracy of the integrated estimate over the entire cycle was also analyzed based on the percentage error. The model based on the radial basis function neural network provided overall better accuracy; however, the others remain viable alternatives due to their simpler structure and because their internal parameters can potentially reveal addnl. information on the mechanisms relating emissions and vehicle operation regime.
REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:429512 CAPLUS
DOCUMENT NUMBER: 142:466239
TITLE: Process to transport a methanol or hydrocarbon product
INVENTOR(S): Bradford, Stuart Ritchie
PATENT ASSIGNEE(S): Shell Internationale Research Maatschappij B. V., Neth.
SOURCE: PCT Int. Appl., 16 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005044954	A1	20050519	WO 2004-EP52679	20041027
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1678275	A1	20060712	EP 2004-791321	20041027
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
JP 2007509908	T	20070419	JP 2006-537296	20041027
US 20070037893	A1	20070215	US 2006-577568	20060427
PRIORITY APPLN. INFO.:			EP 2003-256832 A	20031029
			WO 2004-EP52679 W	20041027

AB A process is disclosed for transportation of MeOH or a hydrocarbon product from one location to another location by means of a ship wherein the MeOH or hydrocarbon product is obtained by (a) separation of air into O2 and N2 by cryogenic distillation, (b) using of the O2 to prepare a (CO + H2) mixture (i.e., synthesis gas) from a carbonaceous source, (c) using of the (CO + H2) mixture to prepare MeOH or a liquid or solid hydrocarbon product (e.g., by Fischer-Tropsch synthesis), and (d) loading of the MeOH liquid or solid hydrocarbon product in the ship together with the N2 from the step a to obtain an inert atmospheric

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2004:1127105 CAPLUS
DOCUMENT NUMBER: 142:58689
TITLE: Use of waste nitrogen from air separation units for blanketing cargo and ballast tanks
INVENTOR(S): O'Rear, Dennis J.
PATENT ASSIGNEE(S): Chevron U.S.A. Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 12 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20040259961	A1	20041223	US 2003-464543	20030619
US 7087804	B2	20060808		
AU 2004250189	A1	20041229	AU 2004-250189	20040616
WO 2004113472	A2	20041229	WO 2004-US19297	20040616
WO 2004113472	A3	20051110		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
GB 2421510	A	20060628	GB 2006-803	20040616
BR 2004011600	A	20060808	BR 2004-11600	20040616
CN 1835901	A	20060920	CN 2004-80023458	20040616
JP 2007526158	T	20070913	JP 2006-517338	20040616
US 20060243184	A1	20061102	US 2006-477904	20060630
US 20060243950	A1	20061102	US 2006-477905	20060630

PRIORITY APPLN. INFO.: US 2003-464543 A 20030619
WO 2004-US19297 W 20040616

AB The present method relates to the use of a primarily nitrogen -containing blanketing agent from the air separation unit of a Gas-To-Liqs., Heavy Hydrocarbon Conversion, or Methanol Synthesis Facility on transport vessels. The primarily nitrogen containing blanketing agent is used to reduce corrosion, reduce product biodegrdn. and oxidation, control invasive species, and prevent fires and explosions by reducing oxygen content. Accordingly, this method relates to integrated processes for producing hydrocarbonaceous products and using a primarily nitrogen-containing blanketing agent supplied from the process in shipping the products. A process flow diagram is presented.

L2 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2004:252233 CAPLUS
DOCUMENT NUMBER: 140:272784
TITLE: Fluidized bed reactor with multiple risers and consolidated transport for hydrocarbon conversions
INVENTOR(S): Brookhart, Walter R.
PATENT ASSIGNEE(S): Exxonmobil Chemical Patents Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 23 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20040059171	A1	20040325	US 2002-253106	20020924
US 7122160	B2	20061017		
WO 2004029178	A1	20040408	WO 2003-US17121	20030530
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003232464	A1	20040419	AU 2003-232464	20030530
EP 1565541	A1	20050824	EP 2003-798661	20030530
EP 1565541	B1	20080514		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
AT 395395	T	20080515	AT 2003-798661	20030530
ES 2305562	T3	20081101	ES 2003-798661	20030530
PRIORITY APPLN. INFO.:			US 2002-253106 A	20020924
			WO 2003-US17121 W	20030530

AB The reactor comprises multiple riser reactors, each having a first end for catalyst feeding and a second end for catalyst discharge; a separation zone for separating the catalyst from products of hydrocarbon conversion processes; ≥1 transport conduit having a first end connected to ≥2 two ends of the riser reactors and a second end extending into the separation zone; and ≥1 catalyst return for transferring the catalyst from the separation zone to the first ends of the riser reactors.

REFERENCE COUNT: 84 THERE ARE 84 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
=> s (load? or add? or cover? or top?) (s) hydrocarbon (s) nitrogen
        468798 LOAD?
       4033368 ADD?
        544251 COVER?
        631687 TOP?
        365162 HYDROCARBON
        362794 HYDROCARBONS
        560242 HYDROCARBON
                 (HYDROCARBON OR HYDROCARBONS)
        732618 NITROGEN
          4235 NITROGENS
        735596 NITROGEN
                 (NITROGEN OR NITROGENS)
L3         508 (LOAD? OR ADD? OR COVER? OR TOP?) (S) HYDROCARBON (S) NITROGEN

=> s (load? or add? or cover? or top?) (s) hydrocarbon product (s) nitrogen
        468798 LOAD?
       4033368 ADD?
        544251 COVER?
        631687 TOP?
        365162 HYDROCARBON
        362794 HYDROCARBONS
        560242 HYDROCARBON
                 (HYDROCARBON OR HYDROCARBONS)
       1330177 PRODUCT
       1567958 PRODUCTS
       2528809 PRODUCT
                 (PRODUCT OR PRODUCTS)
          2217 HYDROCARBON PRODUCT
                 (HYDROCARBON(W)PRODUCT)
        732618 NITROGEN
          4235 NITROGENS
        735596 NITROGEN
                 (NITROGEN OR NITROGENS)
L4           0 (LOAD? OR ADD? OR COVER? OR TOP?) (S) HYDROCARBON PRODUCT (S)
                 NITROGEN

=> s (load? or add?) (s) hydrocarbon  (s) nitrogen
        468798 LOAD?
       4033368 ADD?
        365162 HYDROCARBON
        362794 HYDROCARBONS
        560242 HYDROCARBON
                 (HYDROCARBON OR HYDROCARBONS)
        732618 NITROGEN
          4235 NITROGENS
        735596 NITROGEN
                 (NITROGEN OR NITROGENS)
L5         466 (LOAD? OR ADD?) (S) HYDROCARBON  (S) NITROGEN

=> s l5 and fischer tropsch
         27967 FISCHER
            30 FISCHERS
         27988 FISCHER
                 (FISCHER OR FISCHERS)
          9856 TROPSCH
          9770 FISCHER TROPSCH
                 (FISCHER(W)TROPSCH)
L6           2 L5 AND FISCHER TROPSCH

=> d his
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     (FILE 'HOME' ENTERED AT 17:57:21 ON 24 FEB 2009)

     FILE 'CAPLUS' ENTERED AT 17:57:43 ON 24 FEB 2009
L1            70 S TRANSPORT? (S) HYDROCARBON? (S) NITROGEN
L2             4 S L1 AND FISCHER TROPSCH
L3           508 S (LOAD? OR ADD? OR COVER? OR TOP?) (S) HYDROCARBON (S) NITROGE
L4             0 S (LOAD? OR ADD? OR COVER? OR TOP?) (S) HYDROCARBON PRODUCT (S)
L5           466 S (LOAD? OR ADD?) (S) HYDROCARBON  (S) NITROGEN
L6             2 S L5 AND FISCHER TROPSCH

=> s l6 not l2
L7             2 L6 NOT L2

=> d l7 ibib ab tot
```

L7 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1999:743160 CAPLUS
DOCUMENT NUMBER: 131:341064
TITLE: Transient emissions comparisons of alternative compression ignition fuels
AUTHOR(S): Clark, Nigel N.; Atkinson, Christopher M.; Thompson, Gregory J.; Nine, Ralph D.
CORPORATE SOURCE: West Virginia University, WV, USA
SOURCE: Society of Automotive Engineers, [Special Publication] SP (1999), SP-1482(Alternative Fuels 1999), 1-15
CODEN: SAESA2; ISSN: 0099-5908
PUBLISHER: Society of Automotive Engineers
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The effects of fuel composition on emissions levels from compression ignition engines can be profound, and this understanding has led to mandated redns. in both sulfur and aromatic content of automotive diesel fuels. A Navistar T444E (V8, 7.3 L) engine was installed on an engine dynamometer and subjected to transient emissions measurement using a variety of fuels, namely federal low sulfur pump diesel; California pump diesel; Malaysian Fischer-Tropsch fuel with very low sulfur and aromatic content; various blends of soy-derived biodiesel; a Fischer-Tropsch fuel with very low sulfur and 10% aroms.; and the same Fischer-Tropsch fuel with 10% isobutanol by volume The biodiesel blends showed their ability to reduce particulate matter, but at the expense of increasing oxides of nitrogen (NOx), following the simple argument that cetane enhancement led to earlier ignition. However, the Fischer-Tropsch fuels showed their ability to reduce all of the regulated emissions. In particular, the fuel with ultra low sulfur and aromatic content showed a noticeable benefit over present day California fuel. Adding the alc. isobutanol to the Fischer-Tropsch diesel reduced oxides of nitrogen and particulate matter over the straight Fischer-Tropsch fuel, but hydrocarbon levels were raised to the extent that the (NOx plus hydrocarbons) level rose. In several of the runs, continuous particulate matter emission levels were measured using a tapered element oscillating microbalance (TEOM), thereby providing deeper insight into the emissions behavior of the fuels.
REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1999:235780 CAPLUS
DOCUMENT NUMBER: 130:340373
TITLE: Transient emissions comparisons of alternative compression ignition fuels
AUTHOR(S): Clark, Nigel N.; Atkinson, Christopher M.; Thompson, Gregory J.; Nine, Ralph D.
CORPORATE SOURCE: West Virginia University, USA
SOURCE: Society of Automotive Engineers, [Special Publication] SP (1999), SP-1412(Alternative Fuels for CI Engines), 9-22
CODEN: SAESA2; ISSN: 0099-5908
PUBLISHER: Society of Automotive Engineers
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The effects of fuel composition on emissions levels from compression ignition engines can be profound, and this understanding has led to mandated redns. in both sulfur and aromatic content of automotive diesel fuels. A Navistar T444E (V8, 7.3 L) engine was installed on an engine dynamometer and subjected to transient emissions measurement using a variety of fuels, namely * federal low sulfur pump diesel; * California pump diesel; * Malaysian Fischer-Tropsch fuel with very low sulfur and aromatic content; * various blends of soy-derived biodiesel; * a Fischer-Tropsch fuel with very low sulfur and 10% aroms.; and * the same Fischer-Tropsch fuel with 10% isobutanol by volume The biodiesel blends showed their ability to reduce particulate matter, but at the expense of increasing oxides of nitrogen (NOx), following the simple argument that cetane enhancement led to earlier ignition. However, the Fischer-Tropsch fuels showed their ability to reduce all of the regulated emissions. In particular, the fuel with ultra low sulfur and aromatic content showed a noticeable benefit over present day California fuel. Adding the alc. isobutanol to the Fischer-Tropsch diesel reduced oxides of nitrogen and particulate matter over the straight Fischer-Tropsch fuel, but hydrocarbon levels were raised to the extent that the (NOx plus hydrocarbons) level rose. In several of the runs, continuous particulate matter emission levels were measured using a tapered element oscillating microbalance, thereby providing deeper insight into the emissions behavior of the fuels.
REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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=> d his

     (FILE 'HOME' ENTERED AT 17:57:21 ON 24 FEB 2009)

     FILE 'CAPLUS' ENTERED AT 17:57:43 ON 24 FEB 2009
L1            70 S TRANSPORT? (S) HYDROCARBON? (S) NITROGEN
L2             4 S L1 AND FISCHER TROPSCH
L3           508 S (LOAD? OR ADD? OR COVER? OR TOP?) (S) HYDROCARBON (S) NITROGE
L4             0 S (LOAD? OR ADD? OR COVER? OR TOP?) (S) HYDROCARBON PRODUCT (S)
L5           466 S (LOAD? OR ADD?) (S) HYDROCARBON  (S) NITROGEN
L6             2 S L5 AND FISCHER TROPSCH
L7             2 S L6 NOT L2

=> s (load? or add?) (s) nitrogen (s) transport? (4a) hydrocarbon?
        468798 LOAD?
       4033368 ADD?
        732618 NITROGEN
          4235 NITROGENS
        735596 NITROGEN
                 (NITROGEN OR NITROGENS)
        930365 TRANSPORT?
        562515 HYDROCARBON?
L8             1 (LOAD? OR ADD?) (S) NITROGEN (S) TRANSPORT? (4A) HYDROCARBON?

=> s l8 not l2
L9             1 L8 NOT L2

=> d l9 ibib ab
```

L9 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1999:132518 CAPLUS
DOCUMENT NUMBER: 130:213310
TITLE: Transport and biodegradation of petroleum hydrocarbons at subsurface sand/clay interfaces
AUTHOR(S): Kyle, Giles; Banks, M. Katherine; Reddi, Lakshmi
CORPORATE SOURCE: Purdue University, West Lafayette, IN, 47907, USA
SOURCE: Journal of Environmental Science and Health, Part A: Toxic/Hazardous Substances & Environmental Engineering (1999), A34(1), 1-29
CODEN: JATEF9; ISSN: 1093-4529
PUBLISHER: Marcel Dekker, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The objective of this research was to evaluate the transport and biodegrdn. of an NAPL (hexadecane) in layered soil. The results indicate that there was limited removal of hexadecane from soil by pumping. Biodegrdn. of hexadecane occurred throughout the reactor that was amended with nitrogen and phosphorus. Enhanced biodegrdn. of hexadecane at the soil textural interfaces was not observed Bioremediation systems located in layered soil must be carefully designed to encourage complete remediation throughout the contaminated zone.
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
=> s load? (s) (hydrocarbon or methanol) (s) ship (s) nitrogen
        468798 LOAD?
        365162 HYDROCARBON
        362794 HYDROCARBONS
        560242 HYDROCARBON
                 (HYDROCARBON OR HYDROCARBONS)
        244707 METHANOL
           744 METHANOLS
        245091 METHANOL
                 (METHANOL OR METHANOLS)
         11312 SHIP
         10087 SHIPS
         17390 SHIP
                 (SHIP OR SHIPS)
        732618 NITROGEN
          4235 NITROGENS
        735596 NITROGEN
                 (NITROGEN OR NITROGENS)
L10          0 LOAD? (S) (HYDROCARBON OR METHANOL) (S) SHIP (S) NITROGEN

=> s load? (s) (hydrocarbon or methanol) (P) ship (s) nitrogen
        468798 LOAD?
        365162 HYDROCARBON
        362794 HYDROCARBONS
        560242 HYDROCARBON
                 (HYDROCARBON OR HYDROCARBONS)
        244707 METHANOL
           744 METHANOLS
        245091 METHANOL
                 (METHANOL OR METHANOLS)
         11312 SHIP
         10087 SHIPS
         17390 SHIP
                 (SHIP OR SHIPS)
        732618 NITROGEN
          4235 NITROGENS
        735596 NITROGEN
                 (NITROGEN OR NITROGENS)
L11          0 LOAD? (S) (HYDROCARBON OR METHANOL) (P) SHIP (S) NITROGEN

=> s load? (s) (hydrocarbon or methanol) (P) ship (P) nitrogen
        468798 LOAD?
        365162 HYDROCARBON
        362794 HYDROCARBONS
        560242 HYDROCARBON
                 (HYDROCARBON OR HYDROCARBONS)
        244707 METHANOL
           744 METHANOLS
        245091 METHANOL
                 (METHANOL OR METHANOLS)
         11312 SHIP
         10087 SHIPS
         17390 SHIP
                 (SHIP OR SHIPS)
        732618 NITROGEN
          4235 NITROGENS
        735596 NITROGEN
                 (NITROGEN OR NITROGENS)
L12          0 LOAD? (S) (HYDROCARBON OR METHANOL) (P) SHIP (P) NITROGEN

=> s load? (s) (hydrocarbon or methanol) (P) (vessel or container) (P) nitrogen
        468798 LOAD?
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```
        365162 HYDROCARBON
        362794 HYDROCARBONS
        560242 HYDROCARBON
                 (HYDROCARBON OR HYDROCARBONS)
        244707 METHANOL
           744 METHANOLS
        245091 METHANOL
                 (METHANOL OR METHANOLS)
        258713 VESSEL
        100416 VESSELS
        317246 VESSEL
                 (VESSEL OR VESSELS)
        135382 CONTAINER
         98166 CONTAINERS
        196281 CONTAINER
                 (CONTAINER OR CONTAINERS)
        732618 NITROGEN
          4235 NITROGENS
        735596 NITROGEN
                 (NITROGEN OR NITROGENS)
L13           1 LOAD? (S) (HYDROCARBON OR METHANOL) (P) (VESSEL OR CONTAINER)
                (P) NITROGEN

=> s l13 not l2
L14           1 L13 NOT L2

=> d l14 ibib ab
```

L14 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2006:1129088 CAPLUS
DOCUMENT NUMBER: 145:419610
TITLE: Method for preparing diphenylmethane diisocyanate
INVENTOR(S): Feng, Yuelan; Li, Qifeng; Wang, Junwei; Kang, Maoqing; Wang, Xinkui
PATENT ASSIGNEE(S): Institute of Coal Chemistry, Chinese Academy of Sciences, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 7pp. CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1850792	A	20061025	CN 2006-10012745	20060523

PRIORITY APPLN. INFO.: CN 2006-10012745 20060523

AB The title method comprises: (1) adding di-Me 4,4'-methylenediphenylenedicarbamate and a carrier at a mol. ratio of 100:(250-550) in a reaction vessel, displacing air with nitrogen, reacting at 210-290 °C and 0.090-0.093 MPa for 30-180 min, and collecting methanol at -20 to -60 °C, and (2) loading the reaction solution to a separation column at 200-280 °C and 0.090-0.093 MPa, separating at 130-180 °C to obtain diphenylmethane diisocyanate and the carrier.

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=> log y
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                     152.00     152.22

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                         ENTRY    SESSION
CA SUBSCRIBER PRICE                                      -6.56      -6.56

STN INTERNATIONAL LOGOFF AT 18:17:09 ON 24 FEB 2009
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